

This thesis is concerned with normality and its testing. We often encounter with this topic when using statistical tests and models. Among others, examples such as t tests, analysis of variance and linear regression might be given. In this thesis these tests and models are overviewed and the consequences of the violation of the normality assumption are briefly mentioned. The following section describes statistical tests of normality. For example Shapiro-Wilk test or Anderson-Darling test are explored. For each test of normality is given test statistic and conditions for rejection of the null hypothesis. The last section provides a simulation study. The first part of this study is devoted to exploring whether the empirical relative frequency of Type I error corresponds to the nominal significance level of the test. The second part of the simulation study explores the power of normality tests against various alternatives. The results are summarized and discussed.